

Abstract of the Disclosure

There are provided low expansion transparent glass-ceramics obtained by heat treating a base glass produced at a relatively low melting temperature of 1530°C or below. The glass-ceramics have an average linear thermal expansion coefficient within a range from $+6 \times 10^{-7}/^{\circ}\text{C}$ to $+35 \times 10^{-7}/^{\circ}\text{C}$, 80% transmittance wavelength (T_{80}) of 700nm or below, internal transmittance of 75% or over at light wavelength of 1550nm, heat resisting temperature of 800°C or over and Young's modulus of 90 GPa or over. The glass-ceramics comprise SiO_2 , Al_2O_3 , MgO , CaO , BaO , ZnO , Li_2O , TiO_2 and ZrO_2 and contain β -quartz or β -quartz solid solution as a predominant crystal phase.